

## **SECTION 7 - WATER SUPPLY PROTECTION OVERLAY DISTRICT**

**(Overlay to all other districts)**

### **7.1 Purpose**

The purpose of the Water Supply Protection Overlay District is to safeguard and protect Grafton's sources of water supply. This By-Law is intended to preserve and maintain the filtration and purification function of the land, the ground water table, the purity of ground water supplies, and to protect the public health, safety and welfare.

### **7.2 Findings**

The Town of Grafton finds that:

- a) The ground water supplies underlying Grafton are the primary sources of Grafton's existing and future drinking water supply;
- b) The ground water aquifers are integrally connected with, and flow into, surface waters which constitute significant recreational and economic resources of the town;
- c) Accidental spills and discharges of petroleum products and other toxic and hazardous materials and sewage discharge have repeatedly threatened the quality of such ground water supplies and related water resources throughout towns in Massachusetts, posing potential public health and safety hazards and threatening economic losses to the affected communities;
- d) The groundwater aquifers are recharged by precipitation falling upon the land surface directly above the aquifers, and as more of that land surface is rendered impervious by development, recharge may decrease, threatening the eventual inability of the aquifers to meet the Town's demand for water.

### **7.3 Water Supply Protection Overlay District**

The Water Supply Protection Overlay District, as shown on a map entitled "Water Supply Protection Overlay District, Town of Grafton," shall be considered superimposed over any other district established in this By-Law. This map is hereby made a part of this By-Law and is on file in the Office of the Town Clerk. The Water Supply Protection Overlay District comprises areas in the Town of Grafton where liquid or water-soluble material placed on or below the surface of the land will migrate to municipal well fields. The requirements enumerated hereafter for the Water Supply Protection Overlay District shall be in addition to, rather than in place of, the requirements for the underlying district. Where the boundary line of the Water Supply Protection Overlay District divides any lot existing at the time such line is established, the regulations established hereunder shall not apply to the portion of such lot located within the Water Supply Protection Overlay District, provided such lot does not extend more than 25 feet into the Water Supply Protection Overlay District.

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In the event that the Water Supply Protection District boundaries are in doubt or in dispute, the burden of proof shall be upon the owner(s) of the land in question to show where the boundaries should properly be located. At the request of the owner(s), and at the owner(s)' expense, the town may engage a qualified hydro geologist or Registered Professional Engineer to determine more accurately the precise location of the water supply district boundary.

#### **7.4 Use Regulations**

**7.4.A. Allowed Uses:** Within the Water Supply Protection Overlay District the following uses will be allowed:

**7.4.A.1.** Any use allowed in the underlying zone, unless further regulated or prohibited by this By-Law. Such allowed uses include:

- a. Agricultural, floricultural or horticultural use.
- b. Detached one or two family homes.
- c. Religious uses.
- d. Community and/or neighborhood centers.
- e. Golf driving ranges and miniature golf courses.
- f. Picnic and beach areas.
- g. Retail establishments serving the convenience goods needs of a local area.
- h. Auction galleries and flea markets.
- i. Eating and drinking establishments.
- j. Business, professional and general offices.
- k. Commercial storage of boats, trailers and recreational vehicles.

(T.M. 10-21-91)

**7.4.B. Allowed Uses - Sewered:** Within the Water Supply Protection Overlay District the following uses are allowed with connection to public sewerage and upon the receipt of a special permit, issued in accordance with the provisions of Section 1.5.5 of this Zoning By-Law:

- 7.4.B.1.** Lodging and/or boarding house.
- 7.4.B.2.** Hotel, motel or motor court.
- 7.4.B.3.** Nursing and/or convalescent homes and long term care facilities.
- 7.4.B.4.** Campgrounds

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**7.4.B.5.** Hospitals and clinics for in- and out-patient care.

**7.4.B.6.** Car washes and exterior truck washes.

**7.4.B.7.** Schools.

**7.4.B.8.** Self-service laundries.

**7.4.B.9.** Bed and Breakfast homestay

(T.M. 5-13-91)

**7.4.C. Prohibited Uses:** Within the Water Supply Protection Overlay District the following uses are specifically prohibited:

**7.4.C.1.** Sanitary landfill operations, land filling of septage or the disposal, storage or processing of any solid/liquid waste products per solid waste regulations, 310. CMR **19.006**; (T.M. 10-21-91)

**7.4.C.2.** Package sewage treatment plants;

**7.4.C.3.** Disposal of snow and street sweepings collected from outside the overlay district;

**7.4.C.4.** Storage of road salt, de-icing chemicals, fertilizers, herbicides or pesticides in quantities greater than normally associated with household or agricultural uses;

**7.4.C.5.** Motor vehicle salvage operations and junkyards;

**7.4.C.6.** The use of septic system cleaners which contain toxic organic chemicals;

**7.4.C.7.** Dry cleaning plants;

**7.4.C.8.** Airplane, boat, train and motor vehicle service, repair and painting operations, including auto body shops;

**7.4.C.9.** Storage, transport or sale of petroleum or other refined petroleum products in quantities greater than normally associated with household use, except for the building which it will heat.

**7.4.C.10.** Chemical, biological, biomedical, biotechnological and bacteriological operations including, but not limited to:

**a.** Plating, finishing, polishing of metals.

**b.** Painting, stripping, and finishing of wood products.

**c.** Laboratories and experimental facilities.

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- 7.4.C.11.** Heavy or light manufacturing using hazardous materials in quantities greater than normally associated with household use. Including but not limited to:
- a. Chemical manufacture or processing.
  - b. Machine shops/metal working.
  - c. Commercial photography labs/processors.
  - d. Commercial printers.
  - e. Electronic component manufacturing and assembly.
- 7.4.C.12.** Processing, cooking, distillation or incineration of animal or vegetable product including but not limited to:
- a. Distillery, brewery.
  - b. Slaughter house.
  - c. Fat rendering.
  - d. Soap manufacture.
  - e. Paper manufacture.
  - f. Textile manufacture and processing.
- 7.4.C.13.** Any other use which involves as a principal the manufacture, storage, use, transportation or disposal of a toxic or hazardous material in quantities greater than normally associated with household use.
- 7.4.C.14.** Removal of gravel, soil, loam or other earth material within (5) feet of the maximum annual ground water elevation other than any removal required for the construction of structures; installation of walks; driveways; septic systems; swimming pools; utilities, in the course of normal and customary horticultural; floricultural; or agricultural use of land; or in normal use of a cemetery.
- 7.4.C.15.** Gasoline Service Stations.
- 7.4.C.16.** The storage of animal manures unless covered or contained. (T.M. 10-21-91)
- 7.4.C.17.** The use, storage and manufacture of perchlorate as it applies to:
- a. Fireworks
  - b. Blasting agents
  - c. Other materials containing perchlorate

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**7.4.D. Special Permit Uses:** Within the Water Supply Protection Overlay District, the following uses shall be allowed only upon receipt of a special permit, issued in accordance with the provisions of Section 1.5.5 of this Zoning By-Law and subsections E-H below. Due to the nature of these uses, particular attention must **be** given to protecting the integrity of the aquifer area. Inability to conclusively demonstrate that no contaminants will come into contact with the ground, potentially compromising the integrity of the aquifer, shall cause the special permit to be denied and such uses(s) shall not be conducted.

- 7.4.D.1.** any use involving secondary usage or storage of toxic or hazardous materials in quantities greater than normally associated with household use;
- 7.4.D.2.** any use involving secondary and minimal usage or storage of herbicides, pesticides or fertilizers, other than the amounts normally associated with household or agricultural use;
- 7.4.D.3.** golf courses, either for private or public use;
- 7.4.D.4.** processing or washing of earth materials, including batching plants; commercial cabinet/furniture making;
- 7.4.D.6.** municipal sewage treatment facilities with on-site disposal of primary or secondary treated effluent.
- 7.4.D.7.** underground fuel or other storage tanks, including any tanks or collection pits (wholly or partially below mean ground elevation).
- 7.4.D.8.** Light manufacturing specific to plastic molding, extrusion or fabrication of plastics.

**7.4.E. Special Permit Granting Authority.** The special permit granting authority (SPGA) under this By-Law shall be the Planning Board. Such special permit shall be granted if the SPGA determines, in conjunction with the Department of Public Works, Board of Health and Conservation Commission, that the intent of this By-Law, as well as its specific criteria are met. In making such determination, the SPGA shall give consideration to the simplicity, reliability and feasibility of the control measures proposed and the degree of threat to water quality which would result if the control measures failed. The SPGA shall explain any departures from the recommendations of the other town agencies in its decision.

**7.4.F. Review by Other Town Agencies.** Upon receipt of the special permit application, the SPGA shall transmit one copy to the Department of Public Works, Conservation Commission, Board of Selectmen, Inspector of Buildings, Highway Supervisor, Sewer Commissioners, Town Engineer, the appropriate Water District, and Board of Health for their written recommendations. Failure to respond in writing within 35 days of receipt by the Board shall indicate approval or no desire to comment by said agency. The necessary number of copies of the application shall be furnished by the applicant.

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**7.4.G. Special Permit Criteria.** Special permits under this Section shall be granted only if the SPGA determines, in conjunction with the town agencies as specified above, that ground water quality resulting from on-site waste disposal, recharge of runoff from impervious surfaces, and other on-site operations will not fall below federal or state standards (314 C.M.R. 6.00) for drinking water at the down gradient property boundary; and that the design complies with the applicable criteria specified in Section 7.5.

**7.4.H. Submittals.** In applying for a special permit required by this section, the information listed below shall be submitted:

- 7.4.H.1.** A complete list of chemicals, pesticides, herbicides, fertilizers, fuels and other potentially toxic or hazardous materials to be used or stored on the premises in quantities greater than those associated with normal household use, accompanied by a description of measures proposed to protect all storage containers facilities from vandalism, corrosion and leakage, and to provide for control of spills.
- 7.4.H.2.** A description of potentially toxic or hazardous wastes to be generated, indicating storage and disposal methods.
- 7.4.H.3.** Evidence of approval by the Massachusetts Department of Environmental Protection of any industrial waste treatment or disposal system or any wastewater treatment system over 15,000 gallons per day capacity.
- 7.4.H.4.** Projections of down gradient concentrations of nitrogen, phosphorus, and other relevant chemicals to be disposed of on-site, at property boundaries and other locations deemed pertinent by the Planning Board, prepared by a hydro geologist or Registered Professional Engineer possessing experience and education in Water Supply Protection and Hydrology.

## **7.5 Design and Operations Criteria**

For all uses within the Water Supply Protection Overlay District the following design and operation criteria shall be satisfied where applicable:

**7.5.A. Safeguards:** Provision shall be made to protect against toxic hazardous materials discharge or loss resulting from corrosion, accidental damage, spillage or vandalism through measures such as: spill control provisions in the vicinity of chemical or fuel delivery points; secured storage areas for toxic or hazardous materials; and indoor storage provisions for corrodible or dissolvable materials. For operations which allow the evaporation of toxic or hazardous materials into the interiors of any structures, a closed vapor recovery system shall be provided for each such structure to prevent discharge of contaminated condensate into the ground water.

**7.5.B. Location:** Where the premises are partially outside of the Water Supply Protection Overlay District, potential pollution sources such as on-site waste disposal systems shall be located outside the District to the extent feasible.

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**7.5.C. Disposal:** For any toxic or hazardous wastes to be produced in quantities greater than those associated with normal household use, the applicant must demonstrate the availability and feasibility of disposal methods which are in conformance with **G.L. c. 21C**.

**7.5.D. Ground Water Recharge:** Maximum ground water recharge shall be attained without risking ground water contamination. All runoff from impervious surfaces shall be recharged on the site, by being diverted toward upland areas covered with vegetation for surface infiltration to the extent possible, or as otherwise directed by the Grafton Department of Public Works and Conservation Commission. Dry wells shall be used only where other methods are infeasible, and where used shall be preceded by oil, grease, and sediment traps to facilitate removal of contaminants. No discharge directly into surface waters or wetlands without intervening mitigation measures will be allowed. All recharge areas shall be maintained in full working order by the owner. An annual maintenance plan shall be submitted to the Inspector of Buildings and Town Engineer to assure that the methods used for on site recharge and infiltration shall remain effective.

**7.5.E. Limitation on Impervious Material:** Within the Water Supply Protection Overlay District, not more than 25%, or five thousand (5000) square feet, whichever is greater, of any lot area shall be rendered impervious; the remainder shall be retained as unoccupied space free of all buildings, parking, pavement, including street access drives and walks, and other conditions rendering the land surface impervious; except that the Inspector of Buildings may, after consultation with the Town Engineer and the Conservation Commission, allow up to 75% of the lot area to be rendered impervious, provided that techniques satisfying the requirements set forth above are used to maximize groundwater recharge without risking groundwater contamination. All required unoccupied areas shall be landscaped or stabilized with plant material (except as may be otherwise set forth in Section 5.2.2.3 as pertaining to multi-family dwellings).

## **7.6 Violations**

Written notice of any violation of this By-Law shall be provided by the Inspector of Buildings to the owner of the premises as per Sections 1.3.1 and 1.3.6 of this By-Law, specifying the nature of the violations and a schedule of compliance, including cleanup of any spilled materials. This compliance schedule must be reasonable in relation to the public health hazard involved and the difficulty of compliance. In no event shall more than 30 days be allowed for either compliance or finalization of a plan for longer-term compliance. In the enforcement of this By-Law, the Inspector of Buildings shall notify the Board of Health of any violations and seek the Board of Health's assistance in securing compliance.

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